

Arcola Avenue

Green Streets



Quick Facts

Watershed:	Anacostia River
Sub-Watershed:	Sligo Creek
Completion Year:	2012
Impervious Area Treated:	1.71 acres
Maryland DNR Trust Fund Grant Award:	\$105,190

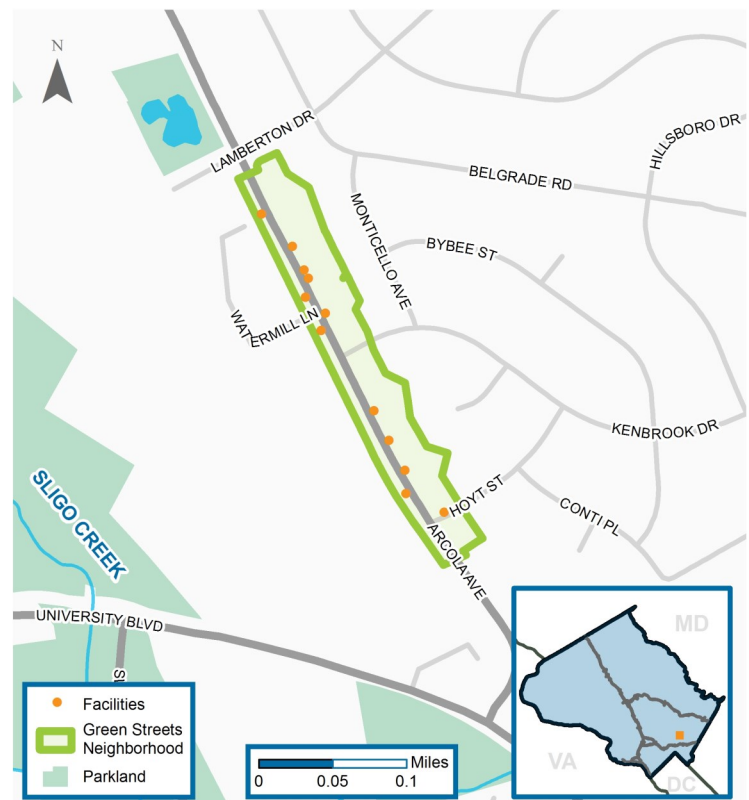
Pre-Restoration Conditions

Much of the development in the Sligo Creek watershed occurred before today's stormwater management practices were in place. In older neighborhoods, stormwater runs off roofs, driveways, and roads into storm drains and directly into streams, carrying trash, oils, nutrients, and other pollutants. The runoff also moves rapidly over paved surfaces, causing higher flows during storms, flash flooding, erosion, streambank instability, and degraded habitat.

Design Approach

DEP partnered with the Montgomery County Department of Transportation (DOT) to install raingardens along Arcola Avenue. In highly developed areas, roadway rights-of-way are often the only available public space to provide stormwater management. Providing treatment along streets addresses stormwater as close to the source as possible.

Raingardens along Arcola Avenue capture and slow down stormwater runoff flowing off the roadway. Sediment, nutrients, and other pollutants are removed and the volume of runoff is reduced. Captured stormwater infiltrates into the ground, helping recharge local streams and provide healthy habitat for fish. On Arcola Avenue, raingardens also act as bump-outs, which help calm traffic.



Water Quality Protection

DEP restoration projects help reduce sediment and nutrient pollution entering local waterways and the Chesapeake Bay.

Nitrogen
Reduced
41.1
lbs/yr

Phosphorus
Reduced
3.28
lbs/yr

Sediment
Reduced
1600
lbs/yr

Bump-out Raingarden



Bump-out raingardens filter and infiltrate stormwater and also provide traffic calming for a busy road.

Bump-out Raingarden



A sign in the raingarden alerts drivers to the curb bumpout. Plantings include a mix of native shrubs and perennials.

Sediment Capture



Concrete pads and cobble at raingarden inlets capture sediment, which is removed during regular maintenance.

Plantings



Evergreen shrubs take up water, promote infiltration, absorb nutrients, and provide winter aesthetic interest.

Contact Us:

AskDEP@montgomerycountymd.gov



This project was funded by Maryland's Chesapeake & Atlantic Coastal Bays Trust Fund and Montgomery County's Water Quality Protection Charge